Didymodon nevadensis Zander (1995)

GOLD BUTTE MOSS

FAMILY: *Pottiaceae*, the pottia family.

STATUS: Heritage Program SENSITIVE LIST, ranks: G2G3 S1

USFWS/ESA: none. **STATE OF NEVADA:** none. **BLM:** Special Status Species in Nevada. **USFS:** none. **NNNPS:** watch list.

POPULATION CENSUS (NEVADA): 12 occurrences mapped; total estimated individuals unknown, total estimated area unknown. TREND: stable.

IMPACTS AND MAJOR THREATS (NEVADA): No summary available (see references).

INVENTORY EFFORT (NEVADA): Surveys are ongoing and may be largely complete in Nevada. Most recent entered survey 1998, average year of last survey 1996. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 58.3%; **6-10 yrs:** 41.7%.

LAND MANAGEMENT (**NEVADA**) in decreasing predominance: U. S. Bureau of Land Management, National Park Service, Nevada state lands, private lands (?).

RANGE: Clark County, Nevada; also in BC, TX, and Mexico. Scattered but wide distribution. Maximum Nevada range dimension 51.5 km (32.0 mi) excluding most disjunct record. Type specimen collected in Clark County.

ELEVATIONS RECORDED (NEVADA): 1312-2316 feet (400-706 meters).

HABITAT (**NEVADA**): On or near gypsiferous deposits and outcrops or limestone boulders, especially on east to north facing slopes of loose uncompacted soil, often associated with other mosses and lichens.

PHENOLOGY: fertile late-winter to spring, Seasonal growth is initiated in autumn from vegetative buds subtending the perichaetium. Stem elongation probably occurs through the cooler months of autumn, winter, and early spring with the production of a perichaetium in spring ending the vegetative growth cycle. Range of most frequent **survey months:** October-June.

LIFE-FORM AND HABIT: long-lived wintergreen moss.

DESCRIPTION: Plants forming a dense turf, blackish green above, reddish brown below. Stems to 1 cm in length, branching occasionally. Rhizoids few, occasionally short, branching and thick-walled, arising from leaf axils. Cauline leaves appressed, weakly twisted clockwise or counterclockwise when dry, weakly spreading when moist; ovate to ovate-lanceolate, adaxial surface broadly channeled at midleaf, narrowly channeled apically; base ovate; upper margins broadly recurved to revolute throughout, entire; apex conic, acute to obtuse, weakly cucullate. Costa percurrent, ending in a broadly conical point. Asexual reproduction by tubers, these spherical, or often elliptical and constricted medially, borne on branching rhizoids from axils of leaves at soil level. Sexual condition apparently dioecious (Zander et al. 1995). **Distinguishing features:** Similar in appearance, and difficult to distinguish, from several other mosses including Didymodon brachyphyllus, D. australasiae, Bryoerythrophyllum columbianum, B. fuscinervis, and Pseudocrossidium crinitum.

PHOTOGRAPHS: Nevada Natural Heritage Program files.

ILLUSTRATIONS: Zander et al. (1995).

SPECIFIC REFERENCES:

Zander, R. H., L. R. Stark, and G. Marrs-Smith. 1995. Didymodon nevadensis, a new species for North America, with comments on phenology. The Bryologist 98: 590-595.

OF FURTHER INTEREST: Forms extensive monospecific populations in a mat-like appearance.